Supplementary Material

*Investigating the foliar uptake of zinc from conventional and nano-formulations: a methodological study.*

Read, Thea L.; Doolittle, Casey L.; Cresswell, Tom; Howell, Nicholas R.; Aughterson, Robert; Karatchevtseva, Inna; Donner, Erica; Kopittke, Peter M.; Schjoerring, Jan K.; Lombi, Enzo

1University of South Australia, Future Industries Institute, Mawson Lakes, South Australia 5095, Australia
2ANSTO, Sydney, Lucas Heights, New South Wales 2234, Australia
3The University of Queensland, School of Agriculture and Food Sciences, St. Lucia, Queensland 4072, Australia
4Department of Plant and Environmental Sciences, Faculty of Science, University of Copenhagen, DK-1871 Frederiksberg C, Denmark

*Corresponding author. Email: Casey.Doolette@.unisa.edu.au

**Supplementary table:**
Table S1: Mean diameter and relative abundance (in brackets) of the different ZnO products for all experiments where PSD is the particle size distribution.

**Supplementary figures:**
Figure S1: Autoradiography was performed on the treated leaf and a new leaf of live plants.
Figure S2: SEM micrograph of unirradiated ZnO-MPs. These particles were then applied to the YFEL of wheat plants.
Figure S3: SEM micrograph of unirradiated ZnO-NPs. These particles were then applied to the YFEL of wheat plants.
Figure S4: High resolution image of irradiated ZnO-NP showing lattice fringes (indicative of ordered layering of atoms) across the entirety of the grains imaged (indicative of completely crystalline grains).
Figure S5: High resolution image of irradiated ZnO-MP showing lattice fringes (indicative of ordered layering of atoms) across the entirety of the grains imaged (indicative of completely crystalline grains).
Table S1: Mean diameter and relative abundance (in brackets) of the different ZnO products for all experiments where PSD is the particle size distribution.

<table>
<thead>
<tr>
<th>Sample I.D.</th>
<th>Intensity PSD</th>
<th>Zeta potential, mV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expt</td>
<td>Original Spiking solution</td>
</tr>
<tr>
<td>ZnO-MP*</td>
<td>1, 2</td>
<td>Peak 1: 143 (90%)</td>
</tr>
<tr>
<td>ZnO-NP*</td>
<td>1, 2</td>
<td>Peak 1: 56 (98%)</td>
</tr>
<tr>
<td>ZnO-NP</td>
<td>3</td>
<td>1029 ± 93 nm</td>
</tr>
<tr>
<td>ZnO-MP</td>
<td>3</td>
<td>2769 ± 430 nm</td>
</tr>
</tbody>
</table>

*data are from Li et al. 2018

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